

MELTDOWN (Newsletters Winter 2000/2001, Summer/Fall 2000, Spring 2000, Winter 1999/2000)



The Pre-Millennium Meltdown. Will it Happen Again?

Occasionally, the sheer excitement of watching the Atlantic roll the pebbles on Lawrencetown Beach overwhelms, and we seek solace in less stressful pastimes: thus it was that we recently retired to the Internet, there to contemplate our navels and ponder the meaning of life. And one of life's more intriguing mysteries (to us) is the market meltdown that started in 1990: its cause, effect and longevity. It was after all a defining moment that, coupled with the explosion in telecommunications and the Internet, changed the way the world viewed real estate. We had of course the advantage, if such an opportunity can be termed an advantage, of witnessing the phenomenon first hand. But why was it world-wide? Did those same forces that fashioned it in Atlantic Canada simultaneously impact on markets in locations as diverse as Japan, Sweden, Thailand, Australia, United Kingdom, United States ... and Canada east of the Rockies? Was this a Machiavellian plot: a subterfuge by Gates to bend us to the will of Windows ... or simply the cresting of the anticipated Kondratieff wave? Why did it occur in some cities, and not their neighbours? Will it occur again? If so when? Can it be avoided?

Thanks to the Internet, The Wharton School and our own navels, we have the answer. So, if you are an investor, have ambitions to be one, or are simply tired of seeing Garth Turner being proved right night after night at each stockmarket bell, read on ... But first, a retrospective: let's look back through time to the dark days of 1990 (shudder).

1990 And All That

The Canadian recession in 1990 hit real estate markets east of the Rockies, hard. In essence the events in Atlantic Canada were a microcosm of similar markets elsewhere. In retrospect it is difficult to fully appreciate the meltdown in commercial property values that did occur. Indeed at the time, our Property Tax Division expended much nervous energy attempting to convince the Provincial Assessment Departments of the reality of the situation. It was particularly difficult because the weak market first manifested itself as a paucity of sales activity ... because of mortgage commitments, vendors could not afford to sell at the price purchasers were willing to pay. Since there were no sales at the low prices, the Provincial Assessors took the position that, ipso facto, values had not fallen. We digress! In Atlantic Canada, the impact of the recession was felt most in Nova Scotia, and least in New Brunswick. However, even in Nova Scotia, the office market in Halifax suffered to a far different degree than that in Sydney. There is a lesson to be drawn from this (we think).

We pinpoint May 1990 as the start of the real estate recession, based on the reduction in sales volume and prices in the residential property market. (We've tracked this activity continuously since 1978). In

reality however the commercial property markets started to feel the pinch in 1989 as credit dried up. The latter was key. Sales information is not public knowledge in the three Maritime Provinces, and the Newfoundland registry office is such a mess, effectively there is none there either. Because the markets are imperfect, some uninformed purchasers blissfully unaware of the precipitous fall in property values, continued to buy at 1989 prices through to 1992, **provided that they could get financing**. The commercial market meltdown was therefore a three year event which had its beginnings in 1989 (as evidenced by reduced sales volume, but not lower prices), gathered pace during 1990 and 1991 (few sales, little credit), and produced some evidence of falling values in 1992 (foreclosure sales, but some less knowledgeable purchasers still buying at 1989 prices if financing was available). By 1993 there were sufficient "distress" sales occurring that all but the obdurate, a.k.a. some Provincial assessors, realised that property values had shifted dramatically downwards. This was no minor price adjustment. Hotels/motels throughout the Atlantic Region plunged in value, on average, by 50%. Industrial properties lost between 25% to 75% (average 44%) of their value if they were situated in Burnside, the region's largest park, located in Dartmouth, Nova Scotia. In Nova Scotia, the further one moved away from the Halifax/Dartmouth area, the greater the drop in value. Industrial properties located in places such as Amherst lost between 50% and 80% of their value. The office sector in the Halifax Central Business District was devastated, losing about 55% of its value. The apartment market dropped 5% to 10% on Halifax Peninsula, 50% in Dartmouth's Highfield Park, and 30% to 50% elsewhere in Metro. Retail, shuddering under the twin impacts of the recession and the growth in "big box" merchandising, also suffered badly. Some Shopping Centres fell in value by 35% (Neighbourhood) to 55% (Community). All this in a Province where, for at least thirty years, (and probably since the Great Depression) property prices had steadily increased, year after year. The banks ran for cover, investors felt betrayed, we questioned whether there was a God ... and saved property owners millions of dollars in successful tax appeals.

Prices started to recover in 1995 led by hotels/motels, apartments (1997), industrial (1997/1998), offices (1998) and retail (1999). We can modestly claim to have correctly forecast the recovery (and thus attracted the supreme accolade, a mention in Frank magazine ... they called us "cockeyed optimists") but not the market meltdown. In hindsight, with the benefit of the Wharton study, the latter was very predictable ... and will be so in the future.

The Wharton Study: An International Perspective

Professors Richard Herring and Susan Wachter of The Wharton School, University of Pennsylvania produced a research paper in 1998 on the Asian Twin Financial Crises. In it they noted that "one striking feature of the current Asian financial crisis is that the most seriously affected countries *first* experienced a collapse in property prices and a consequent weakening of their banking systems *before* experiencing an exchange rate crisis". Their findings on the reason for the collapse in property prices are very germane to our review of Atlantic Canada real estate.

The Wharton study looked at real estate booms and bank crises in Sweden, the United States, Australia, Japan and Thailand. The similarities across these countries and the 1990 crisis in Canada are compelling. Mathematical modelling aside, this is a study in human behaviour worthy of anthropologist Desmond Morris, and it resonates perfectly with our own experience. We suggest that it is particularly useful in predicting real estate cycles. The existence of the latter has been established in studies such as those undertaken for the Royal Institution of Chartered Surveyors, the international body of the property profession, in May 1994 by the Investment Property Databank and the University of Aberdeen (Newsletter Vol. 2 No. 51 Spring 1995 issue) and Dr. Jim Clayton (then of St. Mary's University) and Dr. Stan Hamilton (University of British Columbia) for the Canadian Investment Review Summer 1995 issue (Newsletter Vol. 2 No. 52 Summer 1995 issue). In essence the lesson to be drawn from the Wharton study can be summed up in the immortal phrase "*those that forget their history are destined to repeat it*". To which we, cynics all, would add "and repeat it they will" ... which is probably

the basis for Russian economist Nikolai Kondratieff's long wave theory (Newsletter Vol. 2 No. 52 Summer 1995 issue).

The collapse in property values is due to (1) a sharp fall in demand, or (2) a rapid increase in supply, or (3) both of the foregoing. The Wharton study found that the culprit was a rapid increase in supply fuelled by easy credit from the banking system, which continued long after rising vacancy rates should have signalled an over expansion. The 1990 global recession, which reduced demand, was the final straw and itself was the event which burst the bubble. All of the human factors which had contributed to the irrational expansion of credit to the real estate sector were then applied in reverse as panic set in and the banking sector's worst fears became a self fulfilling prophesy: not only did the banks turn off the credit tap, they attempted to reduce their exposure by reducing loans on real estate thus forcing its liquidation, increasing the supply of property for sale and further causing prices to fall. The banking system was the author of its own misfortune and taxpayers everywhere picked up the tab as governments desperately struggled to prevent the collapse of their financial systems. It was a re-run of the United State's "Savings and Loans" (and Canada's "Trust Company") crisis on a global scale.

Bank Lending; The Human Factor

Rising vacancy rates in the 1980s were a clear indicator that supply was outstripping demand. It is not difficult to predict vacancy rates. Why then did developers and the banks place so little importance on this key indicator and instead prefer to extrapolate historical increases in rents and market values? The Wharton study concludes that humans, unlike pachyderms, forget ... and perhaps wishful thinking played a part too. In synopsis their study found:

1. Developers have imperfect knowledge about future demand and forthcoming supply and since the construction period often spans two to three years may continue to bring new space on stream several years after vacancy rates have started to rise. Thus real estate cycles may occur simply because of forecast errors and lags in the adjustment of the stock of commercial structures.
2. Increases in the price of real estate may increase the economic value of bank capital to the extent that banks own real estate. Such increases will also increase the value of loans collateralized by real estate and may lead to a decline in the perceived risk of real estate lending.
3. The banks suffered from disaster myopia (as did we). Specialists in cognitive psychology have found that decision-makers, even trained statisticians, tend to formulate probabilities on the basis of the "availability heuristic", *the ease with which the decision-maker can imagine that the event will occur*. In most of the countries studied, at least one generation had passed since the last crash in real estate prices. Indeed, in most instances prices had climbed steadily upward for a significant period. Consequently the repayment record on real estate loans was relatively good in comparison to other types of lending. Even when evidence indicating over-supply surfaced, such as rising vacancy rates, it was ignored because of cognitive dissonance ... the conflict between the factual evidence and the banker's belief based on experience that "it just wasn't so". When confronted by the evidence that challenged the competence of their decisions, bankers first ignored it, then rejected it and finally accommodated it by changing other beliefs in order to protect their self-esteem as prudent lenders.

Disaster myopia was shared by a large number of banks because it was conducive to "herding" in which banks take on similar exposures. Being part of a group provides apparent vindication of the individual banker's judgement, and some defence against *ex post* recriminations if the

sky falls in. It is also the result of competition from other banks with disaster myopia, which may force banks who don't suffer from it to ignore the probability ... or lose business.

Standard accounting practices are useless in pricing low frequency shocks that occur so infrequently that they are not captured in the usual reporting period. This problem is often compounded by the practice of recognising fees (which may be considerable in some lines of real estate finance) up front, when the loan is booked, rather than amortising them over the life of the loan. And loans officers whose salaries and bonuses are based on short-term profits may take a similar length view of the transaction because they expect to be elsewhere ... in another job, perhaps in another institution, by the time problems emerge.

Once a shock, i.e. property crash, occurs, disaster myopia may turn into disaster magnification. The availability heuristic may exacerbate financial conditions because, just after the shock has occurred, it is all too easy to imagine another sharp decline in real estate prices and subjective shock probability will rise well above true shock probability. The resultant increase in mortgage rates and/or credit rationing will put further downward pressure on real estate prices and may escalate the retreat in property values into a rout. (It did!).

4. The banks had inadequate data and weak analysis on which to base their loan decisions. Appraisals are of limited usefulness to lenders, they show only what past market values have been, not what they are likely to be during the term over which the loan must be serviced and paid. Using data from the United States, the Wharton study found that appraisals of office buildings were 30% too high based on existing supply and demand, and 50% too high when buildings already started at the appraisal date, came on stream. (*Appraisals are probably even less valid in Canada since the banks insist that the appraisals be commissioned by the borrower, a practice illegal in the United States and other countries, for rather obvious reasons*). Uncritical reliance on current market values lead to errors in underwriting since the value at the date of the loan had little relevance to the expected value of the property when the loan was to be repaid.

It was equally important to monitor indirect exposure, since this may be as debilitating as direct exposure. For example, if a bank has lent heavily to non-bank financial intermediaries such as finance companies that engage in real estate lending, it may be taking on substantial additional exposure to real estate.

5. Bank lending is subject to what the Wharton study termed "perverse incentives". Due to disaster myopia or competition from banks suffering from disaster myopia, lenders accepted higher loan-to-value ratios, weaker guarantees or loose loan covenants. They were encouraged to do so by the "moral hazard problem"; the belief that they would be protected from financial disaster by government action because virtually every country had erected a safety net for depository institutions. Supervisory authorities too were hesitant to admit the scale of the crisis until it was well developed because, like the bankers, they too were subject to cognitive dissonance. They were also reluctant to raise questions that would reflect on the quality of their oversight and they were apprehensive that they would escalate the problem by raising public awareness of it.

Then there is wishful thinking. The bank may prefer to extend a workout loan to enable the borrower to keep current on interest so that the bank can delay (perhaps indefinitely) the costs of writing down the book value of its outstanding exposure. They may do so in the hope too that real estate prices will return to levels attained before the collapse. Supervisory authorities in the countries studied encouraged this policy of forbearance. It actually resulted

in greater losses because banks and developers "went for broke" ... they took higher risks because they had little to lose.

An Atlantic Canadian Perspective

The global scenario uncovered by the Wharton study will be instantly recognisable to anybody involved in mortgage financing in Canada in the 1980s. With the benefit of hindsight it is apparent that the sorry parade of Trust Company failures was an echo of the United States Savings and Loan crisis and presaged the great property crash of 1990. All of the contributory factors governing Trust, Bank and Life Company lending enumerated by Professors Herring and Wachter were much in evidence in Atlantic Canada but their impact was further heightened by the activities of government, notably the Atlantic Canada Opportunities Agency (ACOA). This public body was fuelled with tax dollars. It was (and is) wedded to the notion that "if you build it, they will come". They didn't ... but the hotel rooms did. As a result of ACOA's activities the hotel/motel market experienced sharp increases in supply in various parts of the region. In Sydney, N.S. for example, government funding was responsible for a growth in supply from 537 rooms in 1986 to 851 in 1990, an increase of 58% over this four year period. This resulted in a spate of foreclosures and bankruptcies such as the brand new (ACOA funded) 152 room Sheraton (néé Ramada) Mariner Hotel and the Keddy's Sydney Motel: both in 1992. ACOA spread its largess liberally (no pun intended) in other markets such as Summerside, P.E.I., with similar results. The ACOA funded 50 room Loyalist Inn opened in 1991 ... just as tourist volume on Prince Edward Island dropped by 4% (1990) and 11% (1991). As a result, occupancy rates of the other motels in Summerside plummeted by 60% and one, the Best Western Linkletter promptly went bankrupt. Nor did ACOA confine its enthusiasm to the hospitality sector. Industrial building proceeded apace ... the 1980s were a busy, busy, time for civil servants and politicians intent on reforging the Atlantic economy ... resulting in the silly situation that it was cheaper to build a new 40,000 ft.² warehouse in Port Hawkesbury, N.S. ... and most other small towns in the region ... because of government grants (and hence 50¢ dollars), rather than purchase a vacant, similar property that had been originally constructed without government funding and was thus encumbered with a 75% mortgage. Thus it was that the region ended the decade prior to the 1990 recession with much surplus industrial space too. On the apartment scene, Canada Mortgage and Housing Corporation, also a public body, contributed to an oversupply of rental units. Despite rising vacancy rates they continued well into the 1990s to encourage overbuilding by insuring apartment mortgages ... all of the mortgage. (Today virtually all apartment mortgages for new construction is insured by CMHC ... the Canadian taxpayer is effectively underwriting the risk on all new apartment construction in the Atlantic Region). In 1992 the retail revolution a.k.a. big boxes, attracted government attention and some municipalities decided to subsidise retail development. In the case of the City of Halifax, it was a face saving move. During the 1980s the municipality had built two industrial parks, Bayers Lake and Ragged Lake, to compete with its arch-rival the City of Dartmouth just across the harbour which had its industrial park. Regrettably, although the feast was laid, nobody came. The City faced an embarrassing situation, two fine parks laid out at much public expense: empty! They solved the problem by extending a major artery into Bayers Lake Park through a rapidly expanding residential area, built a major highway interchange, and in 1992 virtually gave away serviced land for retail development. It was a great success ... but it drained retail dollars out of existing shopping centres in the city: one went bankrupt, another committed hari-kari (the Centre, not the owner). The City's timing was doubly unfortunate: not only did they encourage expanded supply just as merchants were scrambling to recover in the aftermath of the region's worst post war recession, but the city's prime shopping district, Spring Garden Road, was expanding as new retail space, started prior to the recession, came on stream. The Park Lane Centre had added 115,000 ft.² to the district in 1988 and was still attempting to lease up. City Centre Atlantic placed an additional 67,000 ft.² of retail on the market in December 1990 and the Spring Garden Place expansion added a further 45,000 ft.² in June 1991. By January 2000, the Bayers

Lake retail park had added over 1.1 million ft.² to Metro's existing retail inventory of 11 million ft.² ... and Spring Garden Road was still struggling to fill retail units completed a decade earlier.

The Rental Rate Conundrum

Government and mortgage activity are not the only forces that cause a mis-match of supply and demand. The Royal Institution of Chartered Surveyor's study on property cycles (Newsletter Vol. 2 No. 52 Summer 1995) found that they had a duration of four to five years, roughly coincident with a "normal" business cycle. However due to the lead/lag factor the two are out of phase. It takes two to three years to bring a new development on stream. Historically in the Halifax C.B.D. for example, developers start assembling land for new office projects when the vacancy rate falls to 6%. Construction activity is at its maximum by the time the vacancy rate has reached 4%. However at this point the business cycle has peaked so the completed buildings start coming on stream on the downward swing and new supply usually peaks as the country enters its next recession. Between the ends of 1974 and 1978 office inventory in the Halifax C.B.D. increased by 51% from 4.45 million ft.² to 6.72 million ft.² just in time for the 1980 recession. The next rapid expansion occurred between 1985 and 1990 when supply increased from 7.54 million ft.² to 10.05 million ft.², an increase of 33% ... just in time for the 1990 recession. During the twenty year period we studied there were four recessions: 1970, 1976, 1981 and 1990 ... and office vacancy rose as a result. Rental rates per ft.² fell by up to 75% as a result of the 1990 recession and only started to recover in 1998. During the previous three recessions however, rental rates had not fallen at all, merely paused during the recessionary year and then continued their upward climb the following year, despite increasing vacancy rates. Why? One possible explanation is inflation: the mid to late 1970s and the 1980s had much higher inflation rates than the 1990s so business incomes were rising and they were better able to pay increased rents. However that theory doesn't really explain the catastrophic fall in rents in 1990. Other towns such as Sydney, N.S. or Moncton, N.B. did not suffer a similar meltdown; in fact Halifax appears to have been uniquely effected in the Maritimes.

The equilibrium price for space is determined at the intersection of the supply and demand curves. In a perfect market, the long run equilibrium price is the aggregate of the fixed (land assembly and construction costs) and variable (operating) costs. In the short run, individual property owners with above normal vacancy, may seek to gain a temporary advantage by discounting the price of their space below its long term equilibrium price with the objective of attracting tenants and thus recovering their variable costs plus some portion of their fixed costs: effectively placing recovery of the remaining portion of their fixed costs "on hold" until the market improves. This is a zero sum game. If all landlords indulge in it, only the tenants "win" since the price will be driven down to the variable cost. Therefore it is self defeating in any market dominated by a single landlord: so small markets such as Sydney or Moncton will hold the line on rents during a recession. In larger markets such as Halifax, where there are several large property owners, the actions of a single landlord will destabilise the market if they control a "signature" property. (A "signature" property is a first tier Class A building commanding the highest rental levels in its marketplace. It is the benchmark against which other Class A ... and inferior space ... is priced). This is what happened in the Halifax marketplace in the early 1990s to ignite the price war which then erupted ... an event that had not occurred in the previous three recessions.

Risk Management

From a property investor's viewpoint, risk management is primarily concerned with supply. So what has changed? Office tenants have changed: they are much more circumspect in their space requirements. Signature buildings are still sought after: signature space is not. Palatial premises are passé: shareholders now cast a more critical eye on the expenditures of their employees. However signature building(s) set the price for the marketplace. If you do not own the signature building you

are always at risk in the event that it reduces its rental rates to capture tenants. Retailing is changing: it is less a social event ... beware of big boxes ... and of municipalities who may be beguiled into encouraging their development with low price land, tax concessions or highway construction. If you are a big box investor beware of municipalities ... they never know when "enough is enough". Credit availability has changed. Real estate mortgage financing is an endangered species. Life companies are demutualizing: they are now answerable to shareholders and are seeking better and more immediate yields. Trust Companies, to all intents and purposes have gone. The banks abhor real estate: few find mortgage financing one of life's pleasures. Governments have run out of money (the good news) so now have less opportunity to distort the marketplace. ACOA is still at it, though they've recently retired from their most recent venture ... financing golf courses. And so is CMHC; so check land availability in the neighbourhood before you invest in apartment property, you might face unwelcome competition.

In our view it all boils down to less new supply and a more stable marketplace for several decades to come.

And that is the one enduring and endearing legacy of the great property crash of 1990 as we sally forth into this new millennium. If you can find financing, this is a propitious time to invest in real estate.

A Retrospective

In our earlier article we took a look at the Wharton study on the 1990 global property crash and added the knowledge we had gained from studying its effects in Atlantic Canada. So it was with some interest that we received, via the Internet, a study by Tanya Pierson entitled "Why Hotel Markets Crash". Tanya is Senior Vice President of Finance at HVS International, the world's largest appraisal and consulting company solely devoted to the hospitality industry. Tanya studied the Salt Lake City hotel scene during its current run up to the February 2002 Olympics.

The Hotel Valuation Index (HVI) published annually by HVS International showed the following actual and projected declines in Salt Lake City hotel values:

Year	Decline	Comments
1998	26%	Actual
1999	37%	Actual
2000	25%	Projected
2001	17%	Projected
2002	11%	Projected
2003	9%	Projected



Tanya's study found that this loss in value was due to a combination of the following factors:

1. An expansion in supply as hotel operators built in anticipation of the Olympics.
2. Reduction in demand due to the closure of primary exits off Interstate 15 as road construction occurred preparatory to the Olympics.

She reasons that property market crashes are usually due to a combination of events:

1. Supply growth.
2. Demand reduction.
3. A negative event.

The negative event is really a sub-set of supply growth or demand reduction and is the "trigger" causing the reduction in demand or expansion in supply.

For more information on HVS and this article visit their web site at www.hvsinternational.com and follow the links (Articles --> Boulder --> Why Hotel Markets Crash).